



## California GHG Emissions Reporting Tool: A Primer

The California GHG Emissions Reporting Tool is a web-based annual reporting tool managed by the California Air Resources Board (ARB). The tool facilitates tracking and reporting of annual data required under the ARB Mandatory Reporting Regulation. The purpose of this primer is to provide a conceptual overview of the reporting tool and its main functions. For detailed instructions of the reporting tool, please consult the complete California GHG Emissions Reporting Tool: Users Guide. This guide along with other reporting information can be found at California's mandatory reporting page <http://www.arb.ca.gov/cc/reporting/ghg-rep/ghg-rep.htm>.

- 1.0 Accessing the Tool
- 2.0 Functional Areas / Overview
- 3.0 Using the Tool

### 1.0 Accessing the Tool

Open the reporting tool web page in your desired browser. The application home page can be found at <https://GHGReport.arb.ca.gov>. All reporting will be done within this website. When you arrive at the site, it should be similar to the graphic displayed in Figure 1.

Figure 1  
Reporting Tool Home Page

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California Environmental Protection Agency  
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### Welcome to the California Air Resources Board's Online Greenhouse Gas (GHG) Reporting Tool.

The reporting tool has been designed to meet the needs of companies and agencies reporting GHGs and other information required by the State's mandatory reporting regulation. It also serves as a unified tool for facility tracking and certification of emission reports as well as data verification by third-party verifiers, as required by the regulation.

Because ARB's GHG reporting tool shares its basic software platform with existing reporting and tracking tools developed for U.S. EPA and The Climate Registry, it is also designed to ease transitions to potential regional and national reporting programs in the future.

A User Guide for the reporting tool is available at the California's mandatory reporting web page, at <http://www.arb.ca.gov/cc/reporting/ghg-rep/ghg-rep.htm>.

### User Login



User ID \*

Password \*

Login

Forgot your [User ID](#) or [Password](#)

Register for an ARB login

To activate a user account for an organization, click the Register button.

Register

Home : [Visit ARB Mandatory Reporting Page](#) : [Return to Top](#)

## 2.0 Functional Areas/Overview

There are three major functional areas of the tool: registration and security, source information, and annual reporting of data.

- 1) **Registration and Security:** The site is a secure, monitored website requiring a user ID and password. You are responsible for maintaining your user ID and abiding by a user license agreement. If you are a manager, you will have authority to grant other users access to the site for your related facilities or power entities.
- 2) **Source Information:** The source information module of the application handles general tracking of information about a facility or power entity. Included in this are identification and tracking data, user profile and relationships, and your annual reporting structure. This is a persistent set of data that can be updated at any time.
- 3) **Annual Reporting:** The annual reporting module facilitates entry, review, and verification of your annual data. The system will permit you to enter data based on how your source's reporting structure was created in the source information module.

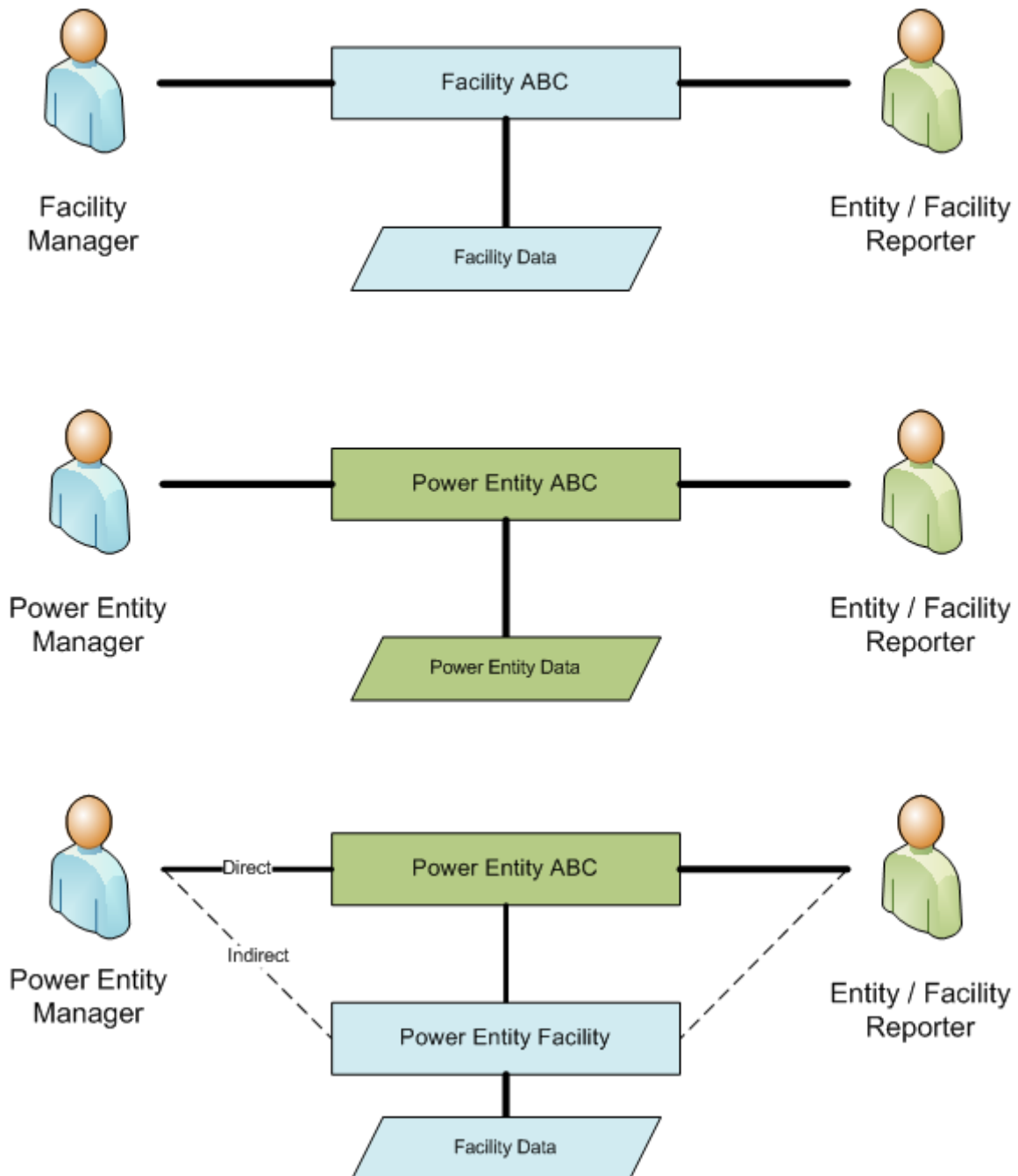
## 2.1 Registration and Security

Access to the system is based on individual users accessing a secure website requiring a user ID and password. You can obtain a login through an initial registration process, or through a secure user granting you access to the tool. Once securely logged in, access to data is controlled by two mechanisms. The first mechanism is based on a user's relationships with organizations. The second is the user security group that is assigned to that user.

The user's relationships to organizations grants him or her the right to see and act upon the organization's information. In addition to direct relationships, users can also see data through indirect relationships. Please see the following example on the next page.

Figure 2  
User Relationship Examples

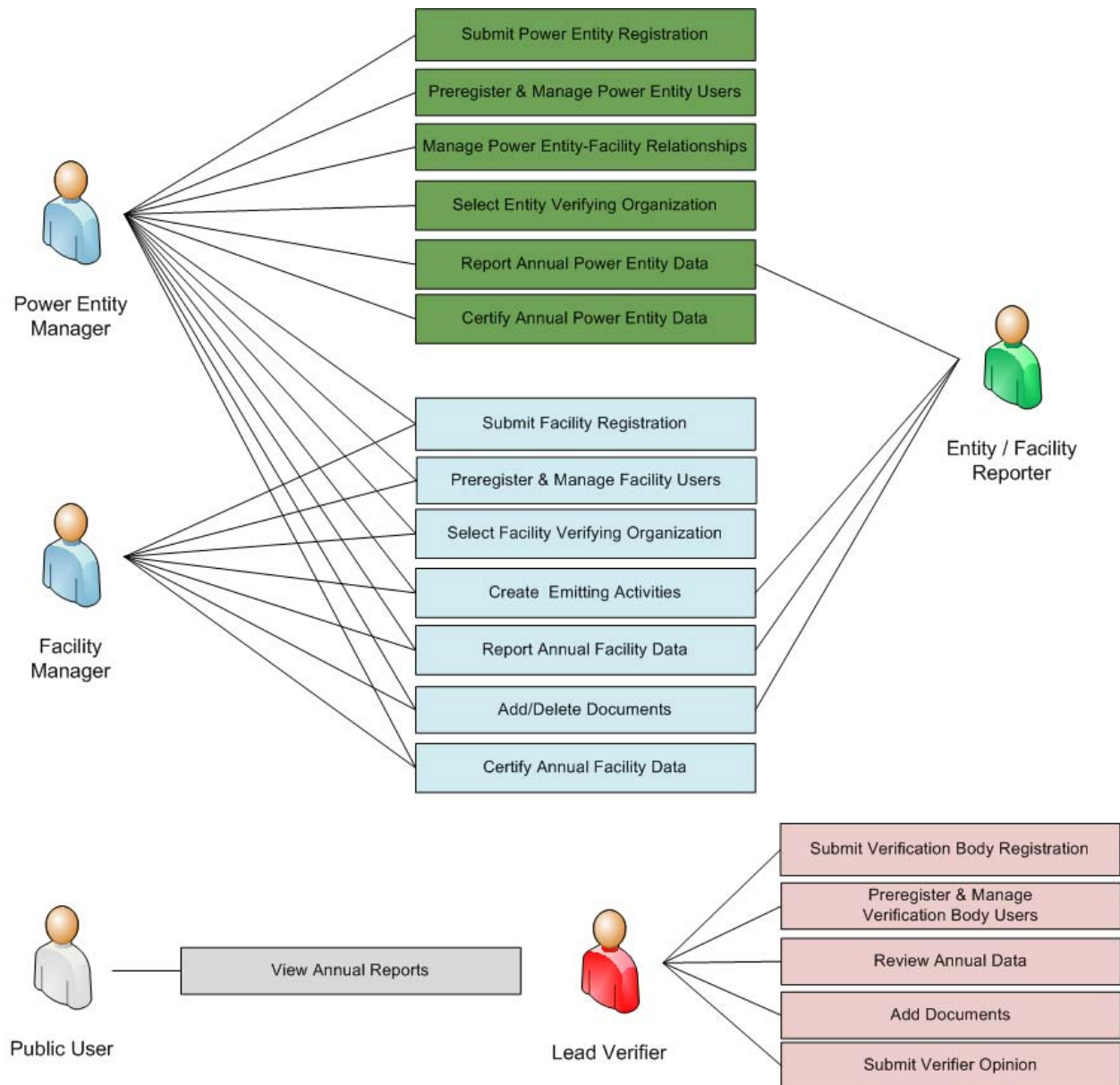
## User Relationships



In addition to the organizational relationships, a person's user group or type limits the actions that person can take in the system. Someone who is a system administrator can see every page and click every button. Someone who is a power entity manager has complete

access to all data for that power entity and all associated facility data. Someone who is a power entity or facility reporter is limited to data entry and unable to certify or verify data. Figure 3 shows the different actions permitted for each user.

Figure 3  
User Group Access and Responsibilities



## 2.2 Structure of the Reporting Tool (Source Information and Annual Reporting)

The tool is designed in a modular format with several different sets of information. The two primary sets of information are the source information and the annual report. Source information is entered once and updated as needed. Establishing this information

helps you report correct and complete emissions data each year. The annual report is comprised of the individual values you report each year. This is located in a separate part of the tool and uses the information entered as part of your source information. The following diagram outlines the information collected during each stage.

Figure 4  
Reporting Tool Structure

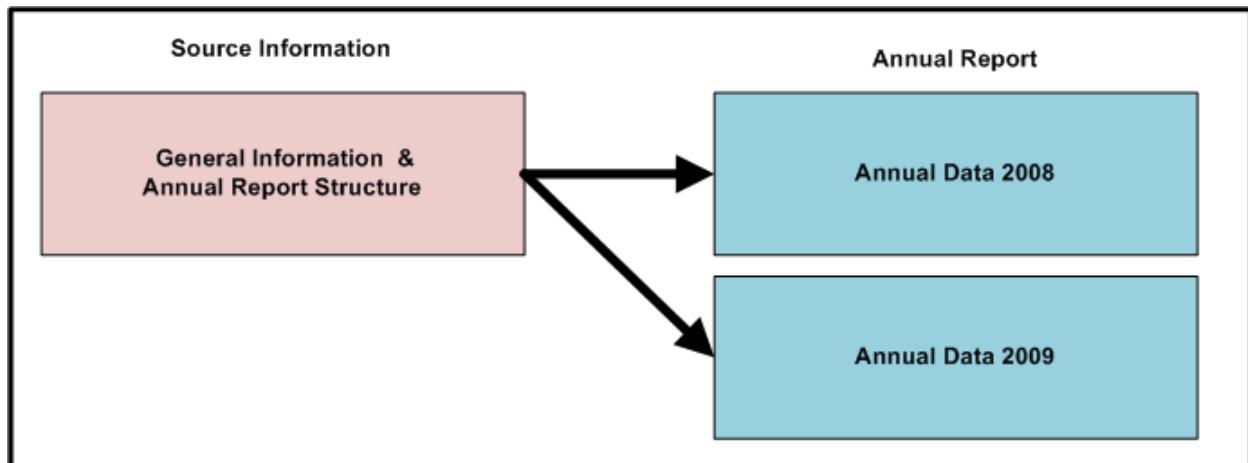
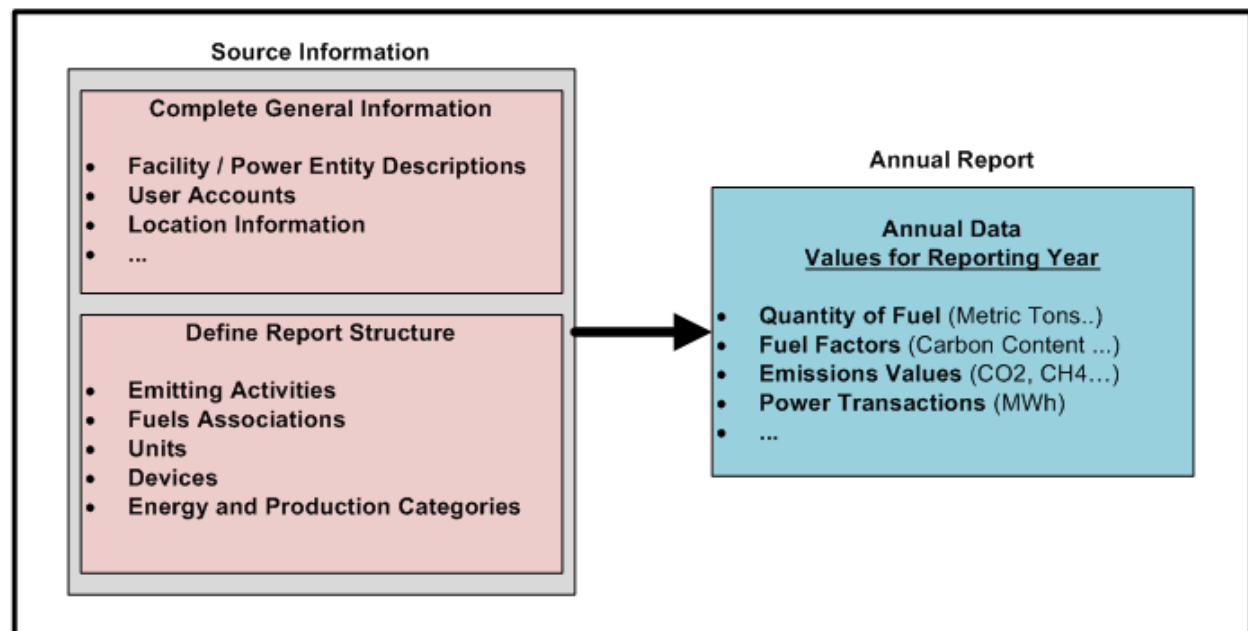


Figure 5  
Reporting Tool Structure with Details



1) Source Information Examples

- ARB ID, Reporting Sectors, NAICS, Facility Description;
- Location Information/Address;
- Relationships to Other Organizations in the System; and
- User Relationships.

2) Annual Reporting Examples

- Annual Emissions Data;
- Annual Fuels Use Data; and
- Electricity Use / Production Data.

3.0 Using the Tool

There are several major tasks that must be completed in order to begin reporting. Figure 6 outlines the major steps that occur within the application beginning with initial registration and ending with a verified annual report.

Figure 6  
General Usage of the Tool

**Using the GHG Reporting Tool  
Year 1 –2008 Reporting Year**

1. Register Your First Facility & User Account (Home Page)
2. Register Additional Facilities (Inside Tool)
3. Complete Basic Facility Information
4. Set Up Additional Users
5. Create Annual Report Structure (Emitting Activities, Units...)
6. Enter Annual Data for 2008
7. Submit Annual 2008 Report

**Using the GHG Reporting Tool  
Year 2 – 2009 Reporting year**

1. Update Annual Report Structure If Needed.
2. Enter Annual Data for 2009
3. Submit Annual 2009 Report

### 3.1 Initial Registration

The ARB has pre-populated the reporting tool with basic information about your organization. This information is limited to the ARB-ID, a primary reporting sector when available, and mailing address. Your initial task is to provide the system with key security information received from ARB (Access Code and ARB-ID) and obtain a user login to access your organization.

Your organization can be one of three options:

- 1) A facility;
- 2) A power entity; or
- 3) A verification body.

This initial login will grant you access to all data associated with that organization and assign you to the managerial user group. For example: If you register with a facility, you will



be created as a Facility Manager. Once in the system, you may add other users and grant them access to the same data.

This registration process begins by clicking the blue "Register" button located on the home page. For step-by-step instructions of the login process please refer to the complete California GHG Emissions Reporting Tool: Users Guide.

### 3.2 Register Additional Facilities

You will only need to conduct this external registration process once. If you are registering multiple organizations, you will complete those through a similar internal process once logged into the system.

### 3.3 Source Information Examples

- 1) ARB ID, Reporting Sectors, NAICS, Facility Description;
- 2) Location Information/Address;
- 3) Relationships - to other entities in the system; and
- 4) User Relationships.

### 3.4 Set Up Additional Users

To properly distribute tasks at your organization, the system grants you the ability to associate other users to your organization. You may create new users, or associate an existing user. As part of associating users to your organization you will need to select the contact type. Users can be managers, alternate managers, or reporters. Once added to your organization, these users will be able to see and edit information based on that contact type.

- 1) Power Entity Managers and Power Entity Reporters will be owners or operators of power entities, and managers, consultants, and other private parties involved in reporting annual data.
- 2) Facility Managers and Facility Reporters will be owners or operators of facilities, facility staff and managers, consultants, and other private parties involved in reporting annual data.

For details on the rights and responsibilities of each user, please consult the complete California GHG Emissions Reporting Tool: Users Guide.

### 3.5 Create Annual Report Structure

Before reporting annual data you must create the reporting structure for that data. This reporting structure will act as a template for your annual report. This structure is persistent and can be reused to report subsequent years of data. Both managers and reporters can adapt these structures.

The primary elements of a reporting structure are:

- 1) Emitting Activities: An emitting activity represents equipment or processes for a power entity, facility, or generating unit that has the capacity to produce emissions.

In some cases an emitting activity may be an aggregation of multiple emitting activities. For example, you may set up individual boilers or group them into a single stationary emitting activity of multiple sources.

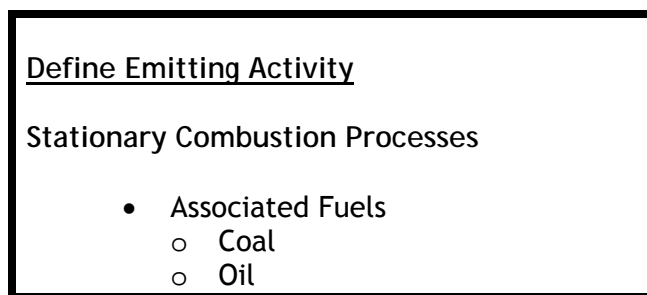
- 2) Units: A generating unit, related to the electricity generation sector, means any combination of physically connected generator(s), reactor(s), boiler(s), combustion turbine(s), or other prime mover(s) operated together to produce electric power.
- 3) Devices: A device is a representation of one or more emissions sources downstream of the last point of metering at a facility.
- 4) Energy and Production Reporting Categories: These categories help the system know what type of production data you will report. Selection will affect what pages are available to you as part of annual reporting. Examples include Indirect Energy Use and Steam Production.

The following example depicts how the initial setup of an emitting activity drives what annual data you can report.

#### Annual Report Structure Example

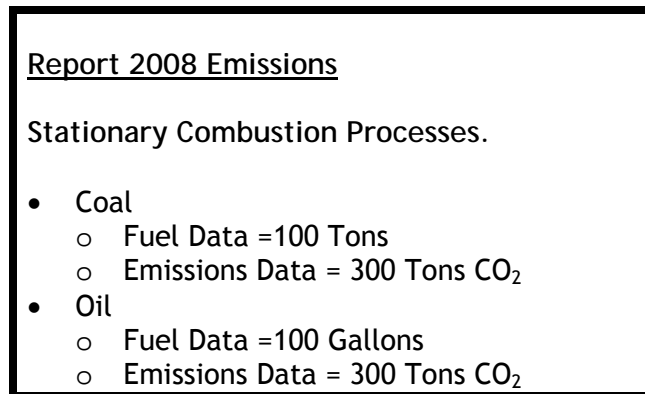
- 1) ABC Facility sets up an emitting activity and associates all fuels related to that activity.

Figure 7  
GHG Emissions Reporting Tool Reporting Flow



- 2) As part of annual reporting, ABC Facility reports required data for that structure.

Figure 8  
GHG Emissions Reporting Tool Reporting Flow



### 3.6 Reporting Data and Your Annual Report

Your annual report is comprised of multiple types and groupings of data. The type of data required for your report depends upon your organization's structure. The reporting tool groups similar data by elements called submissions to aid in the reporting and verification process.

If you are reporting for a facility, you need to report emissions and fuels data as well as various types of production and consumption data usually related to energy.

If you are reporting for a facility with one or more generating units, you need to report emissions and fuels data as well as various types of production and consumption for your facility, and for each specific generating unit.

If you are reporting for a power entity, you will be required to report detailed power transactions data, as well as fugitive SF6 emissions data.

Figures 9, 10, and 11 provide a representation of these concepts.

Figure 9  
Submissions Status Flow

### Facility without Units



Figure 10  
Submissions Status Flow

### Facility with Units

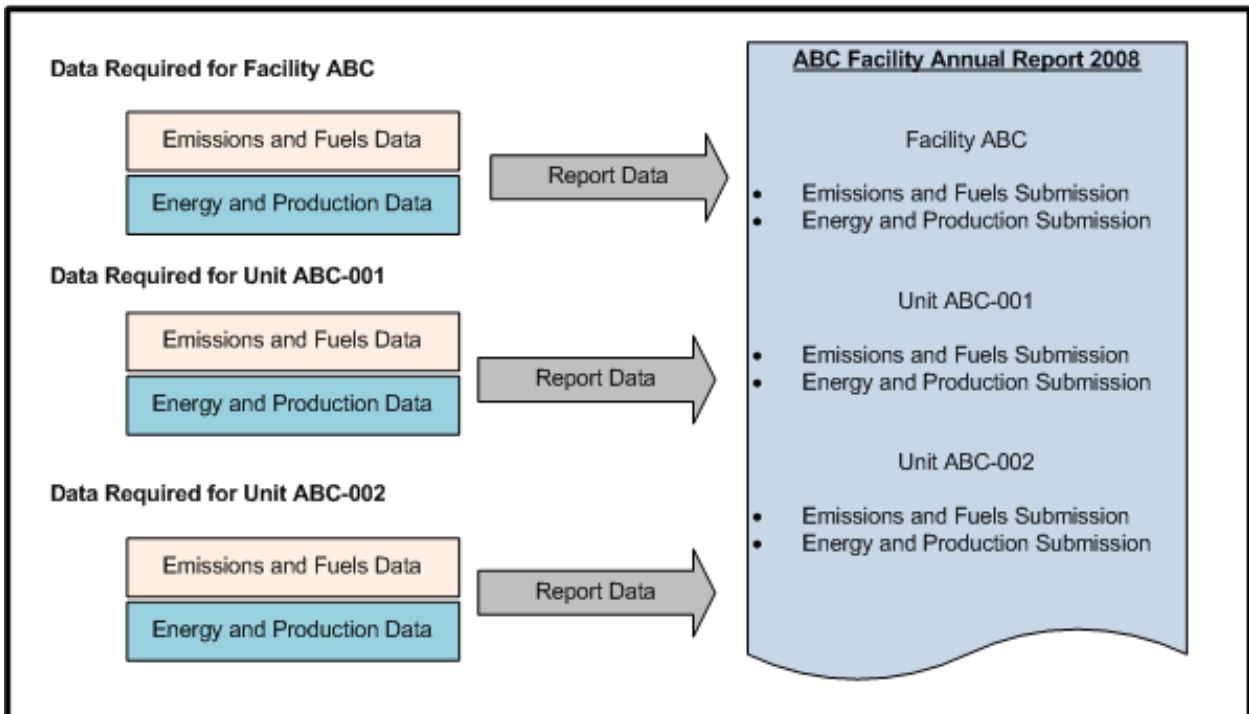
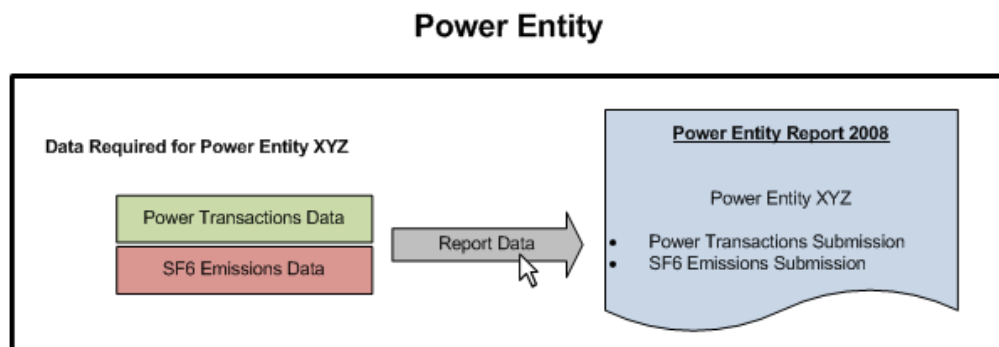


Figure 11  
Submissions Status Flow



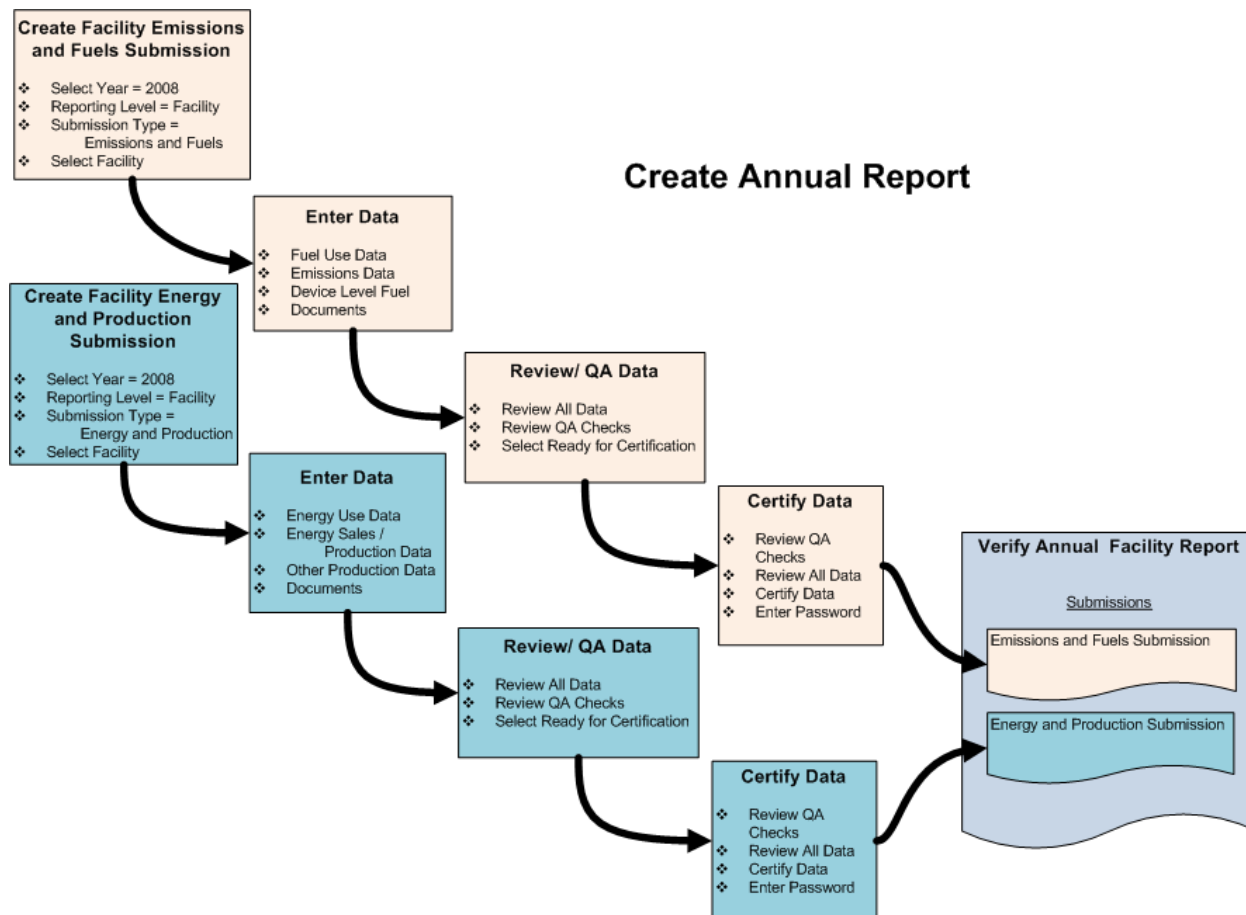
### 3.6.1 Creating Your Annual Report

There are several steps needed to complete your annual report.

The first step is to fully establish your reporting structure as discussed in the previous section. Once you are ready to report, you must create new submissions for each applicable set of data. Submissions are groupings of like data, unique per organization (Facility, Unit, or Power Entity), and report year. You will then go through the data entry process where you can enter or calculate annual data per your regulatory requirements. Once you have completed this process, you must complete a series of review and certification steps. These processes culminate in third-party verification.

Figure 12 depicts the representative flow process for a facility without units. Before verification can begin, both the Emissions and Fuels submission and the Energy and Production Submission must be completed. The verification process is then completed for your entire annual report (a grouping of all related submissions).

Figure 12  
Annual Report Steps



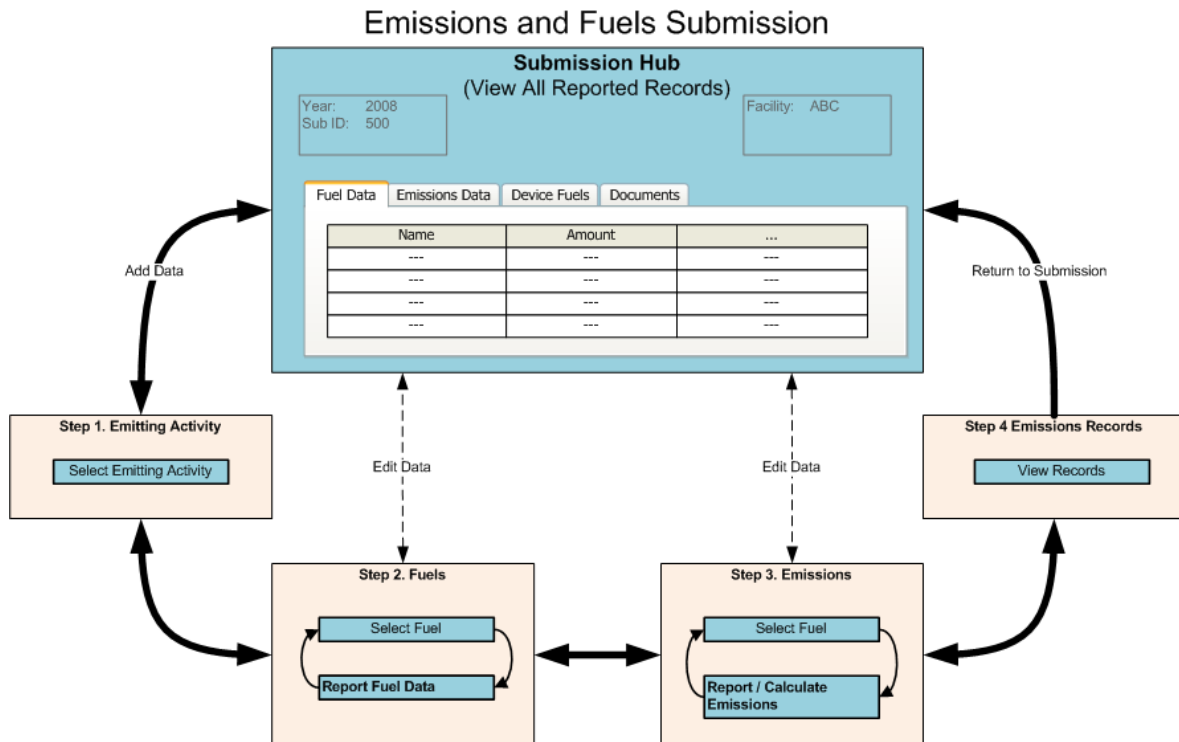
### 3.6.2 Entering Annual Data

You will be required to enter multiple types of data during the reporting process. These types of data differ per each submissions type. However, the general structure of the reporting pages remains the same. Once you have created a unique submission, you may then navigate to that submission's page. This page acts as the hub, displaying all data that has been reported through a series of tabs and providing you with buttons to report or edit data.

The system is designed to be a cyclical data entry pattern, where you can navigate away, enter the correct data, and then return to the hub page.

This cyclical data entry concept is best represented by the emissions and fuels data entry process. The diagram below represents this detailed flow. Note how you will navigate away from the central hub, enter multiple fuel records, continue and enter multiple emission records, and return to the main hub when ready. For detailed explanations of all submission types please refer to the Users Guide.

Figure 13  
Emissions and Fuels Data Entry Cycle



### 3.6.3 Submitting Your Data (Status Flow)

The final process in reporting is the review, certification, and verification process. The system handles this process by assigning a status to your individual submissions. Submissions may only be edited when their status is unverified preliminary data.

Managers will have the ability to certify and unlock data. Verifiers will have the ability to verify data, or send it back to the submitting organization for revisions.

You must complete review, quality assurance checks, and certification for each submission separately. Your submission will not be made available to the verification body until all associated submissions for that year are certified. The following diagram depicts this flow and the associated user who will act on the submission.

Figure 14  
Emissions and Fuels Data Entry Cycle

## Submission Status Flow

